



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,230	06/25/2001	Wolfgang Heimberg	REN-12526	2351
7609	7590	03/30/2004	EXAMINER	
RANKIN, HILL, PORTER & CLARK, LLP 925 EUCLID AVENUE, SUITE 700 CLEVELAND, OH 44115-1405			JOHNSON, JONATHAN J	
			ART UNIT	PAPER NUMBER

1725

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental
Office Action Summary

Application No.

09/869,230

Applicant(s)

HEIMBERG ET AL.

Examiner

Jonathan Johnson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-46 is/are pending in the application.
- 4a) Of the above claim(s) 41 and 42 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-40, 45 and 46 is/are allowed.
- 6) ☒ Claim(s) 22-28, 43 and 44 is/are rejected.
- 7) ☒ Claim(s) 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2-27-02</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1725

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 22-40 and 43-46 are drawn to an apparatus for conducting chemical reactions.

Group II, claims 41-42 are drawn to a method for conducting chemical reactions.

The special technical feature of Group I is the chemical slider, as recited in Claim 1. The forgoing special technical feature is shown in the prior art of Smothers (5,310,523). Therefore, there is no contribution made over the prior art, hence there is no unity of invention and lack of unity is held by the Examiner.

During a telephone conversation with Ken Clark on 2-25-04 a provisional election was made with traverse to prosecute the invention of Group I, claims 22-40 and 43-46. Affirmation of this election must be made by applicant in replying to this Office action. Claims 41-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-25 and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Smethers et al. (5,310,523). Smethers et al. teach a disk capable of operating as the claimed reaction slider (Figure 6a, item 28); a disk capable of operating as the claimed selector slider (Figure 6a, item 26) having a continual control orifice where the selector slider is capable of moving relative to the reaction slider (col. 4, ll. 40-46); and a disk capable of operating as a chemical slider, located on the opposite side of the reaction slider to the selector slider (Figure 6a, item 24) and the reaction chambers of the reaction slider and the feed holes of the chemical slider are arranged along an orbit (Figure 6a, item 24); where the reaction slider and selector slider can be moved by rotation around an axis which passes through the center point of the orbit, one of the reaction chambers and control orifice may be brought into alignment so that the supply can be made (Figure 9a and 9b, item 124); the device is provided for applying a force to the sliders in order to seal their faces this device is acting on a connecting rod (figure 8, item 195), which extends through central openings in the sliders so that a force, which is applied by the device for applying a force to the sliders acts in the area of the axis of rotation (Figure 8, item 195) where both the reaction and selector slider are plate shaped (Figure 7a, item 28 and 72) and where they are drivable independent from one another (col. 4, ll. 44-46 and figure 6a and 6b,

Art Unit: 1725

item 28) where the device for applying pressure may be driven electronically (Figure 10, item 195).

Allowable Subject Matter

Claims 29-40 and 45-46 are allowed.

Claim 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The prior art of record does not suggest or teach a an apparatus for conducting chemical reactions, particularly the arrangement of the pressure device or the arrangement of the feed supply.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7AM-5:30 PM.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Johnson
Examiner
Art Unit 1725